

REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 11, 21 and 24 are amended. Claims 11-21, 23 and 24 are pending.

I. Rejection under 35 U.S.C. § 102

In the Office Action, at page 2, numbered paragraph 2, claims 11, 12 and 21 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Publication No. 2004/0036157 to Akram et al. This rejection is respectfully traversed because Akram does not discuss or suggest:

a single active semiconductor component arranged on a top surface of the substrate and having an outer electrical contact surface,...and a layer of laminated electrically insulating film,
as recited in amended independent claim 11.

Akram shows and discusses a die 12 including integrated circuits 24 formed in a semiconducting substrate.

The Examiner alleges that the single active semiconductor component corresponds with the die 12. As alleged by the Examiner, in Akram, the semiconductor component may include the die, i.e., part of the wafer or the wafer itself, as the die 12, which is formed in a semiconducting substrate. Thus, the die or wafer of Akram is being construed by the Examiner to be part of the semiconductor component (as the Examiner alleges that the die 12 corresponds with the semiconductor component).

In contrast, the present invention of amended claim 11, for example, recites that the semiconductor component is arranged on a top surface of the substrate. Thus, the semiconductor component and the substrate (or alleged "wafer") are separate entities. The die 12 is not a semiconductor component arranged on a top surface of a substrate and having an outer electrical contact surface.

Further, Akram does not discuss or suggest a layer of laminated electrically insulating film, where the film is laminated onto the semiconductor component and the substrate in such a way that the electrical contact is exposed. Akram discusses only that the passivation layer 18 is BPSG (i.e., glass) or SiO₂. However, BPSG or SiO₂ cannot be laminated onto a surface. BPSG or SiO₂ can only be deposited by, for example, chemical vapor deposition. Thus, as here, the

only way for BPSG or SiO₂ to be united to a surface is through deposition, which is not "unit[ing] layers of material by an adhesive," as alleged by the Examiner's dictionary citation.

Accordingly, since Akram only discusses the use of passivation layers that are deposited and not laminated, Akram does not disclose a layer of laminated electrically insulating film.

Additionally, Akram discusses a passivation layer of BPSG or SiO₂, which is only generated using a deposition process. However, a BPSG or SiO₂ layer can only be produced with a substrate present and thus cannot be preformed and then pressed or laminated onto the substrate. The present invention of claim 11, for example, specifically recites that the layer is an insulating film, which is distinct from a mere layer that is only created through a deposition process. The use of the term "film" is specific in that the film may exist **entirely by itself** and then be laminated onto the substrate. The passivation layer in Akram, however, requires that the layer be formed using the deposition process and thus the layer is not a "film" which is able to be laminated onto the substrate. The term "film" is distinct from that of "layer," as one of ordinary skill in the art would be aware that a film is capable of existing by itself (without having a substrate present), whereas a layer is not capable of existing without the substrate present.

Therefore, as Akram does not discuss or suggest "a single active semiconductor component arranged on a top surface of the substrate and having an outer electrical contact surface,...and a layer of laminated electrically insulating film, wherein the layer of laminated electrically insulating film is laminated onto the semiconductor component and the substrate in such a way that the electrical contact is exposed," as recited in amended independent claim 11, claim 11 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(e) rejection is respectfully requested.

Further, Akram does not discuss or suggest "producing a single active semiconductor component on a top surface of a substrate, the single active semiconductor component having an outer electrical contact surface facing away from the substrate;...and laminating a layer of electrically insulating film onto the semiconductor component and the substrate in such a way that the electrical contact is exposed [emphasis added]," as recited in amended independent claim 21. Akram is entirely silent as to the passivation layer being able to be laminated onto the integrated circuit 24 and the die 12 in such a way that the die contact 16 is exposed. Therefore, claim 21 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(e) rejection is respectfully requested.

Claim 12 depends directly from independent claim 11 and includes all the features of claim 11, plus additional features that are not discussed or suggested by the reference relied

upon. For example, claim 12 recites that “the discrete passive electrical component is a capacitor, and the electrical connection line is an electrode of the capacitor.” Therefore, claim 12 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the §102(e) rejection is respectfully requested.

II. Rejections under 35 U.S.C. § 103

In the Office Action, at page 4, numbered paragraph 3, claims 11-15, 18 and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,365,498 to Chu et al. in view of U.S. Patent No. 6,197,613 to Kung et al. This rejection is respectfully traversed because the combination of the teachings of Chu and Kung does not suggest all the features of amended independent claims 11 and 24.

In particular, the Examiner concedes that Chu does not suggest that the semiconductor component is a single active semiconductor component arranged on a substrate, but indicated that Kung makes up for the deficiencies in Chu.

Kung discusses that the semiconductor structure 10 is build on a silicon substrate 12 **with active devices built therein**. However, Kung does not discuss or suggest that the active semiconductor devices are arranged **on a top surface** of the substrate 12. Kung specifically clarifies that the active devices are built therein.

In addition, the Examiner alleges, in arguing that the Examiner has provided motivation to combine the references, that “forming active devices, such as transistors, on a substrate is well known and typical in semiconductor components, such as memory cells, [and that the] Applicant has not provided any evidence or rationale to show that such a limitation is not well known or conventional. First, the burden is on the Examiner to establish a prima facie case of obviousness, by providing, as required by KSR International v. Teleflex, an “explicit” rationale as to an “apparent reason to combine the known elements in the fashion claimed by the patent at issue. KSR Int’l Co. v. Teleflex, Inc., No. 04-1350 (U.S. Apr. 30, 2007), slip op. at 14.

Thus, merely reciting that forming active devices on a substrate is well known and typical in semiconductor components does not provide any rationale as to particularly why the device of Chu would have been modified to include a single active semiconductor component arranged on a top surface of the substrate and having an outer electrical contact surface. The burden is not on the Applicant to provide any evidence or rationale to show that such a limitation is not well known or conventional **until the Examiner has adequately established a prima facie case of**

obviousness, which includes at least some explicit rationale as to why the references are to be combined in the manner claimed by the application at issue.

Therefore, as the combination of the teachings of Chu and Kung does not suggest "a single active semiconductor component arranged on a top surface of the substrate and having an outer electrical contact surface,...[and] a layer of laminated electrically insulating film," as recited in amended independent claims 11 and 24, claims 11 and 24 patentably distinguish over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Claims 12-15 and 18 depend either directly or indirectly from independent claim 11 and include all the features of claim 11, plus additional features that are not discussed or suggested by the reference relied upon. For example, claim 15 recites that "the discrete passive electrical component is a part of a sensor of a physical variable." Therefore, claims 12-15 and 18 patentably distinguish over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

In the Office Action, at page 7, numbered paragraph 4, claims 16, 17, 19 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chu and Kung and further in view of U.S. Publication No. 2002/0036345 to Iseki et al. This rejection is respectfully traversed.

As discussed above, the combination of the teachings of Chu and Kung does not suggest all the features of independent claim 11. Iseki fails to make up for the deficiencies in Chu and Kung. Therefore, claim 11 patentably distinguishes over the references relied upon.

Claims 16, 17, 19 and 20 depend either directly or indirectly from independent claim 11 and include all the features of claim 11, plus additional features that are not discussed or suggested by the reference relied upon. For example, claim 17 recites that "the power semiconductor component is selected from the group consisting of MOSFETs, IGBTs and bipolar transistors." Therefore, claims 16, 17, 19 and 20 patentably distinguish over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

In the Office Action, at page 7, numbered paragraph 5, claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Akram in view of Kung. This rejection is respectfully traversed.

As discussed above, Akram does not suggest all the features of independent claim 21. Kung fails to make up for the deficiencies in Akram. Therefore, claim 21 patentably distinguishes over the references relied upon.

Claim 23 depends directly from independent claim 21 and includes all the features of claim 21, plus additional features that are not discussed or suggested by the reference relied upon. For example, claim 23 recites that "the layer of electrically insulating film is first applied, and then the electrical contact is exposed by opening a window in the electrically insulating material." Therefore, claim patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Conclusion

In accordance with the foregoing, claims 11, 21 and 24 have been amended. Claims 11-21, 23 and 24 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

By:



Kari P. Footland
Registration No. 55,187

Date: July 18, 2008

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501